

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-89 (Canceled)

Claim 90 (Currently Amended) The method of claim 88 or 89 95 or 99 wherein the nucleic acid molecule encoding B7-2 is a viral vector.

Claim 91 (Previously Presented) The method of claim 90 wherein the viral vector is selected from the group consisting of a retroviral vector, an adenoviral vector, and an adeno-associated vector.

Claim 92 (Currently Amended) The method of claim 88 or 89 95 or 99 wherein the nucleic acid molecule encoding B7-2 is a plasmid expression vector.

Claims 93-94 (Canceled)

Claim 95 (Previously Presented) A method for treating a mammalian subject having a solid tumor, comprising direct injection of a nucleic acid molecule encoding B7-2 molecule in a form suitable for expression of the B7-2 molecule, into cells of the tumor, wherein the B7-2 molecule has the ability to costimulate a T cell and the ability to bind a CD28 or CTLA4 ligand, such that the growth of the tumor is inhibited.

Claim 96 (Previously Presented) The method of claim 95, wherein B7-2 comprises the amino acid sequence shown in SEQ ID NO:2.

Claim 97 (Previously Presented) The method of claim 95, wherein the nucleic acid molecule encoding B7-2 comprises the nucleic sequence shown in SEQ ID NO:1.

Claim 98 (Previously Presented) The method of Claim 95 wherein the solid tumor is selected from the group consisting of carcinoma, sarcoma, melanoma and neuroblastoma.

Claims 99 (Previously Presented) A method for modifying cells of a solid tumor *in vivo* to express a B7-2 molecule, comprising direct injection of a nucleic acid molecule encoding a B7-2 molecule in a form suitable for expression of the B7-2 molecule, into the tumor cells, wherein the B7-2 molecule has the ability to costimulate a T cell and the ability to bind a CD28 or CTLA4 ligand, such that B7-2 is expressed by the tumor cells.

Claim 100 (Currently amended) The method of claim 99 wherein the B7-2 molecule comprises the amino acid sequence shown in SEQ ID NO:2.

Claim 101 (Previously Presented) The method of claim 99 wherein the nucleic acid encoding a B7-2 molecule comprises the nucleic acid sequence shown in SEQ ID NO:1.

Claim 102 (Currently Amended) The method of claim 95 or 99 wherein the tumor cells are further transfected with at least one nucleic acid molecule encoding a B7 protein.

Claim 103 (Currently Amended) The method of claim 95 or 99 wherein the tumor cells are further injected with at least one nucleic acid molecule encoding at least one MHC class II α chain protein and at least one MHC class II β chain protein in a form suitable for expression of the MHC class II α chain protein(s) and the MHC class II β chain protein(s).

Claim 104 (Currently Amended) The method of claim 95 or 99 wherein the tumor cells are further transfected with at least one nucleic acid molecule encoding at least one MHC class I α chain protein in a form suitable for expression of the MHC class I protein(s).

Claim 105 (Currently Amended) The method of claim 95 or 99 wherein the tumor cells are further transfected with a nucleic acid molecule encoding a β -2 microglobulin protein in a form suitable for expression of the β -2 microglobulin protein.

Claim 106 (Canceled)

Claim 107 (Currently Amended) The method of claim 106 95 or 99 wherein expression of the MHC class II invariant chain is inhibited in the tumor cells by transfection of the tumor cells with a nucleic acid molecule which is antisense to a regulatory or a coding region of the invariant chain gene.

Claim 108 (Previously Presented) The method of claim 99 wherein the solid tumor is selected from a group consisting of a carcinoma, sarcoma, melanoma and neuroblastoma.

Claim 109 (Previously Presented) A method of increasing the immunogenicity of a cells of a solid tumor comprising, direct injection of a nucleic acid molecule encoding a B7-2 molecule in a form suitable for expression of the B7-2 molecule, into the tumor cells, wherein the B7-2 molecule has the ability to costimulate a T cell and the ability to bind a CD28 or CTLA4 ligand, such that B7-2 is expressed by the tumor cells, to thereby increase the immunogenicity of the tumor cells.

Claim 110 (Previously Presented) The method of Claim 109 wherein B7-2 comprises the amino acid sequence shown in SEQ ID NO:2.

Claim 111 (Previously Presented) The method of Claim 109 wherein the nucleic acid molecule encoding a B7-2 molecule comprises the nucleic sequence shown in SEQ ID NO:1.

Claim 112 (Previously Presented) The method of Claim 109 wherein the solid tumor is selected from a group consisting of a carcinoma, sarcoma, melanoma and neuroblastoma.

Claim 113 (New) The method of claim 109 wherein the tumor cells are further transfected with at least one nucleic acid molecule encoding a B7 protein.

Claim 114 (New) The method of claim 109 wherein the tumor cells are further injected with at least one nucleic acid molecule encoding at least one MHC class II α chain protein and at least one MHC class II β chain protein in a form suitable for expression of the MHC class II α chain protein(s) and the MHC class II β chain protein(s).

Claim 115 (New) The method of claim 109 wherein the tumor cells are further transfected with at least one nucleic acid molecule encoding at least one MHC class I α chain protein in a form suitable for expression of the MHC class I protein(s).

Claim 116 (New) The method of claim 109 wherein the tumor cells are further transfected with a nucleic acid molecule encoding a β -2 microglobulin protein in a form suitable for expression of the β -2 microglobulin protein.

Claim 117 (New) The method of claim 109 wherein expression of the MHC class II invariant chain is inhibited in the tumor cells by transfection of the tumor cells with a nucleic acid molecule which is antisense to a regulatory or a coding region of the invariant chain gene.